

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
2 October 2003 (02.10.2003)

PCT

(10) International Publication Number  
**WO 03/081354 A1**

(51) International Patent Classification<sup>7</sup>: **G05B 19/4097**

(21) International Application Number: **PCT/KR02/01605**

(22) International Filing Date: 26 August 2002 (26.08.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
2002-0016154 25 March 2002 (25.03.2002) KR

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(81) Designated States (*national*): JP, US.

(84) Designated States (*regional*): European patent (DE, FR, GB).

Published:

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHOD FOR PERFORMING DELTA VOLUME DECOMPOSITION AND PROCESS PLANNING IN A TURNING STEP-NC SYSTEM

(57) Abstract: A profile of a finished part is recognized based on an inputted CAD data. A delta volume for the finished part is decomposed based on information on cutting tools and the profile. Thereafter, a dependency graph representing precedence relation between the decomposed delta volumes is generated. And then, a process sequence graph representing process plans is generated based on the dependency graph. The delta volume decomposition is performed based on information on cutting tools and a machine configuration as well as part geometry, such that the decomposed delta volumes are suitable to be cut away from a raw stock by the cutting tools.

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